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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,963

10/30/2003

Thomas H. Massie

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12/27/2007

GOODWIN PROCTER LLP  
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EXAMINER

FATAHI YAR, MAHMOUD

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

12/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/697,963	Applicant(s) MASSIE ET AL.	
	Examiner Mike Fatahiyar	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 54-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 54 is/are allowed.
- 6) ☒ Claim(s) 1-12, 17, 20-26 and 55-60 is/are rejected.
- 7) ☒ Claim(s) 13-16, 18-19 and 63-64 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claim 62 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In this claim, the recited "optical technology" is vague and indefinite because it is not clear to what it refers. In other words, what constitute the optical technology is unclear. Correction and/or clarification is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 12 and 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLean et al(6,529,183B1) in view of Rowe et al(6,344,848B1) and Rockwell(5,384,688).

MacLean et al discloses a force reflective haptic interface(501) including at least three degrees of freedom and a user interface(502A, 502B, 502C) wherein the user interfaces are detachable and interchangeable and it may be any kind of input devices(see column 10, lines 27-62; column 15, lines 39-67 and column 16). MacLean et al substantially show all the features of the above claims except for the "nose section and a user connection section which is detachable and interchangeable", "jack and chuck arrangement", "multiple components that interlock without requiring a fastener", the "nose section comprising at least one electrical wiring circuit" and the "first and the second user inputs on the user connection section". However, Rowe et al is cited to

show that the concept of using a stylus assembly made of multiple detachable sections which are interchangeable wherein a user connection section(110) couples to a nose section(120) using **any kind of coupling fasteners**(column 3, lines 20-46) and the stylus has a housing which has multiple components that interlock without requiring a fastener(see figures 4A-4D). Rockwell is also cited to show that the concept of utilizing a nose section(68) secured to a user connection section(80) having a first and a second user inputs(88) mounted on the user section(80) is old(see figure 5-7 and column 4, lines 17-44). Thus, it would have been obvious to one of ordinary skill in the art to modify the system of MacLean et al with the above noted teachings of Rowe et al and Rockwell such that the tagged objects(502A-502C) would have a nose section and a user section which are detachable and interchangeable and are coupled together with a jack and chuck arrangement and the housing of a tagged object includes multiple components that interlock without requiring any fasteners, as evidenced by Rowe et al, and further it would have been obvious to one of ordinary skill in the art to provide at least one electrical wiring circuit in a nose section which allows for direction of an electronic signal from the user connection section to the force reflecting haptic interface, as evidenced by Rockwell, because all the applied references are related to use of an interface device for inputting coordinated information.

4. Claims 7-11, 17 and 20-26 rejected under 35 U.S.C. 103(a) as being unpatentable over MacLean et al, Rowe et al and Rockwell as applied to claim 1 above, and further in view of Haanpaa et al(2001/0002098A1).

MacLean et al, Rowe et al and Rockwell are discussed above. Haanpaa et al cited to show that the concept of utilizing a user interface device having a first and a second user input (17) which are customizable and adaptable to modify a function of the user interface, wherein the user interface is adapted to function as a force feedback device and a computer mouse and a digitizer and having a docking station(8) which has a sensor in a force reflective haptic device having at least three degrees of freedom is old([0043], [0053 – 0054]). Thus, it would have been obvious to one of ordinary skill in the art to apply the above noted teachings of Haanpaa et al to the modified system of MacLean et al such that to provide a first and a second user input which can modify a function of the user interface(502A) and wherein the interface is adapted to function as a force feedback device and a compute mouse or a digitizer and having a docking station with sensor because all the applied references are related to a stylus user interface for inputting coordinate information and further because the secondary reference to Haanpaa et al like the primary reference to MacLean et al is directed to a haptic force reflective device including at least three degrees of freedom.

5. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacLean et al, Row et al and Rockwell, as applied to claim 60 above, and further in view of Tanaka(2002/0140673A1).

MacLean et al, Row et al and Rockwell are discussed above. Tanaka is cited to show that the concept of utilizing a switch in a tip(41) of a stylus user interface is old(see paragraph [0029]). Thus, it would have been obvious to one of ordinary skill in the art to apply the noted teaching of Tanaka to the modified system of MacLean et al

such that to provide a switch in the tip of any of the user interfaces used in the system of MacLean et al for activation because all the applied references are related to input interface devices

6. Claims 13-16, 18-19 and 63-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 54 is allowed.

8. Applicant's arguments with respect to claims 1-26 and 55-64 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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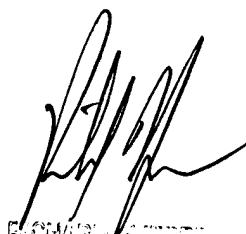
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Fatahiyar whose telephone number is (571)272-7688. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Fatahiyar **MF**

December 25, 2007

  
RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
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